FACT SHEET AND STATEMENT OF BASIS
UTAH DEPARTMENT OF WILDLIFE RESOURCES
MIDWAY FISH HATCHERY
DISCHARGE PERMIT FOR MINOR INDUSTRIAL FACILITY
UT0025879

FACILITY CONTACT:

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Fish Culture Coordinator
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Superintendent
Midway Fish Hatchery
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Physical Address: 850 South 140 East
Midway UT, 84049

DESCRIPTION OF FACILITY:

The Midway Fish Hatchery is a State owned and operated hatchery located just outside of the Town of Midway, Ut. The facility was closed in 2000 after becoming infected with whirling disease. After improvements to the facility to eliminate whirling disease, it was reopened in 2008. Permit coverage since that time has been under the General Permit for Concentrated Aquatic Animal Feeding Operations (General permit for fish hatcheries), UTG130000.

Water at the site comes from three production water wells with a depth of greater than 150 feet. These three production wells will produce 9 cfs year around of good quality flow at 54^{o} F. This water will then run through two sets of two (four) concrete raceways. The raceways are 6.5 feet wide and 650 feet long. The facility raises between 170,000 and 195,000 lbs of Rainbow trout, Cutthroat trout and Kokanee salmon each year.

The SIC for the facility is 0921, Fish Hatcheries and Preserves.

DESCRIPTION OF DISCHARGE:

The facility discharges to Snake Creek, which flows to the Middle Provo River, which in turn flows to Deer Creek Reservoir.

Outfall Number	**Location of Discharge Points**
001	Discharge to Snake Creek located at Latitude 40° 29' 41.9" North and Longitude 111 ° 28' 11.6" West.

RECEIVING WATER CLASSIFICATION:
The facility discharges to Snake Creek, which flows to the Middle Provo River, which in turn flows to Deer Creek Reservoir. The Receiving water classification for Snake Creek is 1C, 2B, 3A.

BASIS FOR EFFLUENT LIMITS: This facility has previously been covered under both individual permit and the General Permit for fish hatcheries. With the exception of phosphorous, this facility meets all of the requirements to be covered under the General Fish Hatchery permit. However, since specific phosphorus limitations are required of this facility in the Deer Creek Reservoir Drainage TMDL study (March 2002), this facility cannot be covered under the General Permit. As a result, all of the effluent limitations are identical to the Fish Hatchery General Permit, with the addition of phosphorous. This determination is based on Best Professional Judgment.

Total suspended solids (TSS) limits contained in this renewal permit are based on *R317-1-3.2 A and B.* The potential for TSS is created by unconsumed fish food and deposition of fish feces. Most of this TSS generated is treated by settling pond(s) at the end of the hatchery. The TSS limitation will be the same as that required in the previous permit (25 mg/L daily maximum).

Reported TSS can be a **"net value"** if the facility water source contributes to and/or causes a violation of effluent limits. If the permittee chooses to report a **"net value"** for TSS, it must monitor the source water as well as the effluent by grab sample.

Based on *R317-1-3.20,* pH shall be limited to a range of 6.5 to 9.0.

E. coli limitations are not included in this permit because no sanitary wastes are allowed to be discharged into hatchery effluents. In addition, in a letter sent from the State by Calvin Sudweeks to Bob Burm of EPA dated November 2, 1979 it was indicated that it was not necessary to include fecal and total coliform (now *E. coli*) in fish hatchery permits. EPA agreed and since that time none have been incorporated into any fish hatchery permits.

Ammonia nitrogen was not included in this permit because it is felt that toxicity due to ammonia is not a problem at any fish hatchery. For that matter, it is felt that fish hatcheries acts as a large bio-monitoring unit, which will indicate the presence of toxicity if any is present.

WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS:
As part of a nationwide effort to control toxic discharges, bio-monitoring requirements are being included in permits for facilities where effluent toxicity is an existing or potential concern. In Utah, this is done in accordance with the *State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity Control (Bio-monitoring).* Authority to require effluent bio-monitoring is

provided in *Permit Conditions, UAC R317-8-4.2*, *Permit Provisions, UAC R317-8-5.3* and *Water Quality Standards, UAC R317-2-5* and *R317-2-7.2*.
Based on said Utah guidelines, the permittee is not a major industrial. There is not reasonable potential for toxicity to exist at this facility. In the event of any unforseen toxicity occurring at the facility the permit does contain a toxicity limitation-reopener provision.

PRETREATMENT REQUIREMENTS:
It is not contemplated that these discharges or any byproducts of these discharges will be connected to the sanitary sewer, therefore, no pretreatment requirements are necessary. Any wastewater connected to a sanitary sewer is subject to Federal, State and local pretreatment regulations promulgated in 40 CFR *Section* 403, and State requirements found in *UAC* R317-8-8. Also the permittee would be subject to any specific local pretreatment limitations developed by the wastewater treatment plant accepting the waste.

STORM WATER REQUIREMENTS:
The SIC code for this facility is 0921. This sector is not required to obtain storm water coverage.

TMDL REQUIREMENTS:
This facility ultimately discharges to Deer Creek Reservoir which is listed on Utah's 2006 303(d) list of impaired water bodies as defined in the Clean Water Act. As required under federal regulations, a total maximum daily load TMDL was developed for this water body in March, 2002. The load allocation for this facility based on that TMDL is 400 kg/year. This effluent limitation has been incorporated into this permit.

SUMMARY OF LIMITATIONS:

The facility will be subject to the following effluent limitations

Parameter	Effluent Limitations					
	Maximum Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum	Monthly Maximum	Yearly Maximum
Flow, MGD	Report	NA	NA	Report	NA	NA
pH, Standard Units	NA	NA	6.5	9.0	NA	NA
Total Suspended Solids mg/L	NA	NA	NA	25	NA	NA
Phosphorus	NA	NA	NA	NA	Report	400 kg/year

NA – Not Applicable

Self-Monitoring and Reporting Requirements			
Parameter	**Frequency**	**Sample Type**	**Units**
Total Flow a/ b/	Daily	Measured	MGD
pH, Standard Units	Monthly	Grab	SU
Total Suspended Solids	Monthly	Grab	mg/L
Phosphorus	Monthly	Grab	mg/l

a/ Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.

b/ If the rate of discharge is controlled, the rate and duration of discharge shall be reported.

Narrative Effluent Limitations:

All outfalls shall be subject to the following narrative effluent limitations:

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
b. There shall be no discharge of sanitary wastes or process water from fish processing operations. Only commercially processed fish feed shall be used (no unprocessed offal or other animal by-products).
c. Rearing of fish within settling ponds and/or waste treatment ponds is not permitted.
d. At least one regular sampling per year shall be taken during raceway cleaning. It shall be noted at the bottom of the discharge monitoring report in the comments section which sample was taken during raceway cleaning.

BEST MANAGEMENT PRACTICES:

On June 30, 2004, EPA's Acting Deputy Administrator signed a final rule to establish wastewater controls for concentrated aquatic animal production facilities. These will help reduce discharges of conventional pollutants (mainly Total Suspended Solids), non-conventional pollutants (such as nutrients, drugs and chemicals) and, to a lesser extent, toxic pollutants (metals and PCBs).

The final rule applies to direct discharges of wastewater from these existing and new facilities:

- Facilities that produce at least 100,000 pounds a year in flow-through and recirculating systems that discharge wastewater at least 30 days a year (used primarily to raise trout, salmon, hybrid striped bass and tilapia).

- Facilities that produce at least 100,000 pounds a year in net pens or submerged cage systems (used primarily to raise salmon).

Since Midway Fish Hatchery meets the above criteria, they will be required to develop and certify a Best Management Plan within 120 days of permit issuance that includes and describes how the facility will meet the following requirements;

a. Prevention of the discharge of drugs and pesticides that have been spilled and minimize discharges of excess feed.
b. Minimizing the discharge of solids such as uneaten feed, settled solids and animal carcasses.
c. Maintenance of production and wastewater treatment systems.
d. Keep records on numbers and weights of animals, amounts of feed, and frequency of cleaning, inspections, maintenance, and repairs.
e. Staff training to prevent and respond to spills and to properly operate and maintain production and wastewater treatment systems.
f. Reporting the use of experimental animal drugs or drugs that are not used in accordance with label requirements.
g. Reporting failure of or damage to a containment system.

SIGNIFICANT PERMIT CHANGES:
A phosphorus limitation was added to the permit from the Deer Creek TMDL.

PERMIT DURATION:
It is recommended that this permit be effective for a duration of five (5) years.

Drafted by Lonnie Shull
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Utah Division of Water Quality
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